REMARKS

Reconsideration of the present application is respectfully requested in view of the following remarks. Prior to entry of this response, Claims 1, 2, 4, and 7-55 were pending in the application, of which Claims 1, 13, 22, and 55 are independent. In the Office Action dated October 2, 2006, Claim 55 was rejected under 35 U.S.C. § 102(e) and Claims 1, 2, 4, and 7-54 were rejected under 35 U.S.C. § 103(a). Following this response, Claims 1, 2, 4, and 7-55 remain in this application. Applicants hereby address the Examiner's rejections in turn.

I. Rejection of Claim 55 Under 35 U.S.C. § 102(e)

In the Office Action dated October 2, 2006, the Examiner rejected Claim 55 under 35 U.S.C. § 102(e) as being anticipated by U.S. Pat. Pub. No. 2004/0030791 ("*Dorenbosch*"). Claim 55 has been amended, and Applicants respectfully submit that the amendment overcomes this rejection and adds no new matter.

Amended Claim 55 is patentably distinguishable over the cited art for at least the reason that it recites, for example, "means for providing identification information to the first wireless based IP network to register with the first wireless based IP network, the identification information comprising subscriber identity module (SIM) information contained in the dual mode wireless device, wherein the identification information being used to verify the legitimacy of an attempt to access a service, the identification information being maintained by a home location register." Support for the amendment can be found in the specification at least on page 9, lines 22-29.

Consistent with embodiments of the invention, a broadband residential gateway (BRG) 206 may communicate with a first portion 208 of a wired network that may

include various functions that may provide for a voice and data service to a digital cordless handset 104. (*See* specification page 9, lines 22-24.) For example, first portion 208 may provide a home location register (HLR) 214. (*See* specification page 9, lines 22-25.) The HLR may maintain the information for each subscriber to the voice and data services provided to the digital cordless handsets 104. (*See* specification page 9, lines 25-26.) The information may include identification information for a user that may be used to verify the legitimacy of an attempt to access the service and may also store an identification of features applicable for each legitimate user. (*See* specification page 9, lines 26-29.)

In contrast, *Dorenbosch* at least does not disclose the aforementioned recitation. *Dorenbosch* merely discloses transitioning from a first IP address to a second IP address. For example, in *Dorenbosch*, a mobile phone will regularly scan for an appropriate wireless IP connection. (*See* paragraph [0033], lines 1-3.) When the mobile phone finds an appropriate IP connection, it associates with an access point and establishes connectivity with a wired network. (*See* paragraph [0033], lines 3-5.) Alternatively, a basic service set (BSS) may not be associated with a service provider and there may or may not be a roaming agreement between a cellular service provider and an operator of the BSS. (*See* paragraph [0033], lines 7-11.) In *Dorenbosch*, the mobile phone may be able to authenticate independently with the BSS and gain access to the wired networks. (*See* paragraph [0033], lines 11-14.) The mobile phone then uses stream control transmission protocol (SCTP) extension messages to instruct another SCTP endpoint to add the second IP address as an alternative destination address. (*See* paragraph [0033], lines 19-23.) During *Dorenbosch's* process, an

application on the mobile phone continues to use the first IP address over the cellular based IP connection to communicate with station B. (*See* paragraph [0033], lines 23-28.) *Dorenbosch* does not disclose using a home location register to maintain and provide identification information because *Dorenbosch*, merely discloses transitioning from a first IP address to a second IP address.

Dorenbosch does not anticipate the claimed invention because *Dorenbosch* at least does not disclose "means for providing identification information to the first wireless based IP network to register with the first wireless based IP network, the identification information comprising subscriber identity module (SIM) information contained in the dual mode wireless device, wherein the identification information being used to verify the legitimacy of an attempt to access a service, the identification information being maintained by a home location register," as recited by amended Claim 55. Accordingly, independent Claim 55 patentably distinguishes the present invention over the cited art, and Applicants respectfully request withdrawal of this rejection of Claim 55.

II. Rejection of Claims 1-2, 4, 7-16, 19-21, 33, 36-40, 43-46, and 51-54 Under 35 U.S.C. § 103(a)

In the Final Office Action dated January 30, 2006, the Examiner rejected Claims 1-2, 4, 7-16, 19-21, 33, 36-40, 43-46, and 51-54 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,922,559 ("*Mohammed*") in view of U.S. Pat. Pub. No. 2003/0139180 ("*McIntosh*"). Claims 1 and 13 have been amended, and Applicants respectfully submit that the amendments overcome this rejection and add no new matter.

Amended Claim 1 is patentably distinguishable over the cited art for at least the reason that it recites, for example, "means for providing identification information comprising: means for sending subscriber identity module (SIM) information to the wireless access point to register with the wired data network via the first wireless network, wherein the identification information is used to verify the legitimacy of an attempt to access a service and feature applicable for a user, the identification information being provided by a home location register." Amended Claim 13 contains a similar recitation. Support for the amendments can be found in the specification at least on page 9, lines 22-29.

Consistent with embodiments of the invention, a broadband residential gateway (BRG) 206 may communicate with a first portion 208 of a wired network that may include various functions that may provide for a voice and data service to a digital cordless handset 104. (*See* specification page 9, lines 22-24.) For example, first portion 208 may provide a home location register (HLR) 214. (*See* specification page 9, lines 22-25.) The HLR may maintain the information for each subscriber to the voice and data services provided to the digital cordless handsets 104. (*See* specification page 9, lines 25-26.) The information may include identification information for a user that may be used to verify the legitimacy of an attempt to access the service and may also store an identification of features applicable for each legitimate user. (*See* specification page 9, lines 26-29.)

In contrast, *Mohammed* merely discloses an authentication module 422 used to facilitate authentication of a subscriber device within an unlicensed wireless service area. (*See* col. 8, lines 51-53.) *Mohammed's* authentication module 422 includes data

and executable instructions to emulate certain components of a licensed wireless network. (*See* col. 8, lines 53-56.) For example, authentication module 422 emulates a mobile switching center during an authentication process. (*See* col. 8, lines 56-58.) In *Mohammed*, using a home location register to maintain and provide identification information is not used to verify the legitimacy of an attempt to access a service and feature applicable for a user. Rather *Mohammed* merely discloses that module 422 emulates a mobile switching center during an authentication process.

McIntosh does not overcome *Mohammed's* deficiencies. *McIntosh* merely discloses a WLAN 128 coupled to a public network 102 and adapted to enable voice and data communication between the private user equipment terminals (UE) 130. (*See* paragraph [0052], lines 1-7.) Access points of WLAN 128 can be coupled to a wired local area network (LAN 129). (*See* paragraph [0052], lines 7-11.) In *McIntosh*, a communication system 100 is able to communicate between public network 102 and UEs 130 while providing the same functions and services available from much more expensive radios UEs 116 of the public cellular network 104 and/or private cellular network 122. (*See* paragraph [0052], lines 12-19.) In *McIntosh*, using a home location register to maintain and provide identification information is not used to verify the legitimacy of an attempt to access a service and feature applicable for a user. Rather *McIntosh* merely discloses using access points to of WLAN 128 to enable UEs on less expensive LAN 129.

Combining *Mohammed* with *McIntosh* would not have led to the claimed invention because *Mohammed* and *McIntosh*, either individually or in combination, at least do not disclose "means for providing identification information comprising: means

for sending subscriber identity module (SIM) information to the wireless access point to register with the wired data network via the first wireless network, wherein the identification information is used to verify the legitimacy of an attempt to access a service and feature applicable for a user, the identification information being provided by a home location register," as recited by amended Claim 1. Amended Claim 13 includes a similar recitation. Accordingly, independent Claims 1 and 13 each patentably distinguishes the present invention over the cited art, and Applicants respectfully request withdrawal of this rejection of Claims 1 and 13.

Dependent Claims 2, 4, 7-12, 14-16, 19-21, 33, 36-40, 43-46, and 51-54 are also allowable at least for the reasons described above regarding independent Claims 1 and 13, and by virtue of their respective dependencies upon independent Claims 1 and 13. Accordingly, Applicants respectfully request withdrawal of this rejection of dependent Claims 2, 4, 7-12, 14-16, 19-21, 33, 36-40, 43-46, and 51-54.

III. Rejection of Claims 34, 49, and 50 Under 35 U.S.C. § 103(a)

In the Office Action, the Examiner rejected Claims 34, 49, and 50 under 35 U.S.C. § 103(a) as being unpatentable over *Mohammed* in view of *McIntosh* in view of U.S. Patent No. 6,373,817 ("*Kung*"). Dependent Claims 34 and 50 are patentably distinguishable over the cited art for at least for the reason that they include, due to their dependency on amended independent Claim 13, "providing identification information associated the dual mode digital cordless handset to the wired data network, wherein the wireless access point is configured to use subscriber identity module (SIM) information from the dual mode digital cordless handset to determine if a user

associated with the dual mode digital cordless handset is a subscriber to the wired data network, wherein the identification information is used to verify the legitimacy of an attempt to access a service and feature applicable for a user, the identification information being provided by a home location register." Claim 49 contains a similar recitation due to its dependence on amended independent Claim 1. Support for the amendments can be found in the specification at least on page 9, lines 22-29.

Consistent with embodiments of the invention, a broadband residential gateway (BRG) 206 may communicate with a first portion 208 of a wired network that may include various functions that may provide for a voice and data service to a digital cordless handset 104. (*See* specification page 9, lines 22-24.) For example, first portion 208 may provide a home location register (HLR) 214. (*See* specification page 9, lines 22-25.) The HLR may maintain the information for each subscriber to the voice and data services provided to the digital cordless handsets 104. (*See* specification page 9, lines 25-26.) The information may include identification information for a user that may be used to verify the legitimacy of an attempt to access the service and may also store an identification of features applicable for each legitimate user. (*See* specification page 9, lines 26-29.)

In contrast, *Mohammed* merely discloses an authentication module 422 used to facilitate authentication of a subscriber device within an unlicensed wireless service area. (*See* col. 8, lines 51-53.) *Mohammed's* authentication module 422 includes data and executable instructions to emulate certain components of a licensed wireless network. (*See* col. 8, lines 53-56.) For example, authentication module 422 emulates a mobile switching center during an authentication process. (*See* col. 8, lines 56-58.) In

Mohammed, using a home location register to maintain and provide identification information is not used to verify the legitimacy of an attempt to access a service and feature applicable for a user. Rather *Mohammed* merely discloses that module 422 emulates a mobile switching center during an authentication process.

McIntosh does not overcome *Mohammed's* deficiencies *McIntosh*. *McIntosh* merely discloses a WLAN 128 coupled to a public network 102 and adapted to enable voice and data communication between the private user equipment terminals (UE) 130. (*See* paragraph [0052], lines 1-7.) Access points of WLAN 128 can be coupled to a wired local area network (LAN 129). (*See* paragraph [0052], lines 7-11.) In *McIntosh*, a communication system 100 is able to communicate between public network 102 and UEs 130 while providing the same functions and services available from much more expensive radios UEs 116 of the public cellular network 104 and/or private cellular network 122. (*See* paragraph [0052], lines 12-19.) In *McIntosh*, using a home location register to maintain and provide identification information is not used to verify the legitimacy of an attempt to access a service and feature applicable for a user. Rather *McIntosh* merely discloses using access points to of WLAN 128 to enable UEs on less expensive LAN 129.

Moreover, *Kung* does not overcome *Mohammed's* and *McIntosh's* deficiencies. *Kung* merely discloses a chase me method of routing a variable bit rate communication between a first terminal and a distant terminal over alternative networks including a circuit switched network and a packet network. (*See* Abstract.) *Kung's* method permits changing routing parameters remotely in response to user inputs including user requested changes in chasing parameters. (*See* Abstract.) In Kung, a chase me

system permits setting a chase me bit when a call is not immediately deliverable and chasing a subscriber even if the message is to be delivered by converting the message to text for delivery by paging the subscriber. (*See* Abstract.) Like *Mohammed* and *McIntosh*, in *Kung*, using a home location register to maintain and provide identification information is not used to verify the legitimacy of an attempt to access a service and feature applicable for a user. Rather, in *Kung*, nothing is used to verify the legitimacy of an attempt to access a service and feature applicable for a user, much less a home location register.

Combining *Mohammed* with *McIntosh* and *Kung* would not have led to the claimed invention because *McIntosh*, *Mohammed*, and *Kung,* either individually or in combination, at least do not disclose "providing identification information associated the dual mode digital cordless handset to the wired data network, wherein the wireless access point is configured to use subscriber identity module (SIM) information from the dual mode digital cordless handset to determine if a user associated with the dual mode digital cordless handset is a subscriber to the wired data network, wherein the identification information is used to verify the legitimacy of an attempt to access a service and feature applicable for a user, the identification information being provided by a home location register," as included in dependent Claims 34 and 50. Dependent Claim 49 includes a similar recitation. Accordingly, dependent Claims 34, 49, and 50 patentably distinguish the present invention over the cited art, and Applicants respectfully request withdrawal of this rejection of dependent Claims 34, 49, and 50.

IV. Rejection of Claim 35 Under 35 U.S.C. § 103(a)

In the Final Office Action, the Examiner rejected Claim 35 under 35 U.S.C. § 103(a) as being unpatentable over *Mohammed* in view of *McIntosh* in view of *Kung* in view of U.S. Published Patent Application No. US 2004/0114603 ("*Suhail*"). Dependent Claim 35 is patentably distinguishable over the cited art for at least for the reason that it includes, due to its dependency on amended independent Claim 13, "providing identification information associated the dual mode digital cordless handset to the wired data network, wherein the wireless access point is configured to use subscriber identity module (SIM) information from the dual mode digital cordless handset to determine if a user associated with the dual mode digital cordless handset is a subscriber to the wired data network, wherein the identification information is used to verify the legitimacy of an attempt to access a service and feature applicable for a user, the identification information being provided by a home location register." Support for the amendment can be found in the specification at least on page 9, lines 22-29.

Consistent with embodiments of the invention, a broadband residential gateway (BRG) 206 may communicate with a first portion 208 of a wired network that may include various functions that may provide for a voice and data service to a digital cordless handset 104. (*See* specification page 9, lines 22-24.) For example, first portion 208 may provide a home location register (HLR) 214. (*See* specification page 9, lines 22-25.) The HLR may maintain the information for each subscriber to the voice and data services provided to the digital cordless handsets 104. (*See* specification page 9, lines 25-26.) The information may include identification information for a user that may be used to verify the legitimacy of an attempt to access the service and may

also store an identification of features applicable for each legitimate user. (*See* specification page 9, lines 26-29.)

In contrast, *Mohammed* merely discloses an authentication module 422 used to facilitate authentication of a subscriber device within an unlicensed wireless service area. (*See* col. 8, lines 51-53.) *Mohammed's* authentication module 422 includes data and executable instructions to emulate certain components of a licensed wireless network. (*See* col. 8, lines 53-56.) For example, authentication module 422 emulates a mobile switching center during an authentication process. (*See* col. 8, lines 56-58.) In *Mohammed*, using a home location register to maintain and provide identification information is not used to verify the legitimacy of an attempt to access a service and feature applicable for a user. Rather *Mohammed* merely discloses that module 422 emulates a mobile switching center during an authentication process.

McIntosh does not overcome *Mohammed's* deficiencies *McIntosh*. *McIntosh* merely discloses a WLAN 128 coupled to a public network 102 and adapted to enable voice and data communication between the private user equipment terminals (UE) 130. (*See* paragraph [0052], lines 1-7.) Access points of WLAN 128 can be coupled to a wired local area network (LAN 129). (*See* paragraph [0052], lines 7-11.) In *McIntosh*, a communication system 100 is able to communicate between public network 102 and UEs 130 while providing the same functions and services available from much more expensive radios UEs 116 of the public cellular network 104 and/or private cellular network 122. (*See* paragraph [0052], lines 12-19.) In *McIntosh*, using a home location register to maintain and provide identification information is not used to verify the legitimacy of an attempt to access a service and feature applicable for a user. Rather

McIntosh merely discloses using access points to of WLAN 128 to enable UEs on less expensive LAN 129.

Moreover, *Kung* does not overcome *Mohammed's* and *McIntosh's* deficiencies. *Kung* merely discloses a chase me method of routing a variable bit rate communication between a first terminal and a distant terminal over alternative networks including a circuit switched network and a packet network. (*See* Abstract.) *Kung's* method permits changing routing parameters remotely in response to user inputs including user requested changes in chasing parameters. (*See* Abstract.) In Kung, a chase me system permits setting a chase me bit when a call is not immediately deliverable and chasing a subscriber even if the message is to be delivered by converting the message to text for delivery by paging the subscriber. (*See* Abstract.) Like *Mohammed* and *McIntosh*, in *Kung*, using a home location register to maintain and provide identification information is not used to verify the legitimacy of an attempt to access a service and feature applicable for a user. Rather, in *Kung*, nothing is used to verify the legitimacy of an attempt to access a service and feature applicable for a user, much less a home location register.

In addition, *Suhail* does not overcome *McIntosh's*, *Mohammed's,* and *Kung's* deficiencies. *Suhail* merely discloses a voice over IP (VOIP) network 8 that includes a graphical proxy server 34 that allows a "dumb" terminals (32) to act as SIP phones or H.323 phones. (*See* Abstract.) In *Suhail*, only the graphical proxy server (34) needs to support the underlying signaling protocol. (*See* Abstract.) The graphical proxy server (34) includes a graphical server (40) and a terminal management system (42). (*See* Abstract.) Like *McIntosh*, *Mohammed,* and *Kung*, in *Suhail*, using a home location

register to maintain and provide identification information is not used to verify the legitimacy of an attempt to access a service and feature applicable for a user. Rather, *Suhail* merely discloses a network that includes a graphical proxy server that allows a dumb terminals to act as SIP phones. In *Suhail*, nothing is used to verify the legitimacy of an attempt to access a service and feature applicable for a user, much less a home location register.

Combining *Mohammed* with *McIntosh*, *Kung,* and *Suhail* would not have led to the claimed invention because *McIntosh*, *Mohammed*, *Kung,* and *Suhail* either individually or in combination, at least do not disclose "providing identification information associated the dual mode digital cordless handset to the wired data network, wherein the wireless access point is configured to use subscriber identity module (SIM) information from the dual mode digital cordless handset to determine if a user associated with the dual mode digital cordless handset is a subscriber to the wired data network, wherein the identification information is used to verify the legitimacy of an attempt to access a service and feature applicable for a user, the identification information being provided by a home location register," as included in dependent Claim 35. Accordingly, dependent Claim 35 patentably distinguish the present invention over the cited art, and Applicants respectfully request withdrawal of this rejection of dependent Claim 35.

V. Rejection of Claims 17-18 Under 35 U.S.C. § 103(a)

In the Final Office Action, the Examiner rejected Claims 17-18 under 35 U.S.C. § 103(a) as being unpatentable over *McIntosh* in view of *Mohammed* in view of U.S.

Patent No. 6,970,474 ("*Sinha* "). Dependent Claims 17-18 are patentably distinguishable over the cited art for at least for the reason that they include, due to their dependency on amended independent Claim 13, "providing identification information associated the dual mode digital cordless handset to the wired data network, wherein the wireless access point is configured to use subscriber identity module (SIM) information from the dual mode digital cordless handset to determine if a user associated with the dual mode digital cordless handset is a subscriber to the wired data network, wherein the identification information is used to verify the legitimacy of an attempt to access a service and feature applicable for a user, the identification information being provided by a home location register." Support for the amendment can be found in the specification at least on page 9, lines 22-29.

Consistent with embodiments of the invention, a broadband residential gateway (BRG) 206 may communicate with a first portion 208 of a wired network that may include various functions that may provide for a voice and data service to a digital cordless handset 104. (*See* specification page 9, lines 22-24.) For example, first portion 208 may provide a home location register (HLR) 214. (*See* specification page 9, lines 22-25.) The HLR may maintain the information for each subscriber to the voice and data services provided to the digital cordless handsets 104. (*See* specification page 9, lines 25-26.) The information may include identification information for a user that may be used to verify the legitimacy of an attempt to access the service and may also store an identification of features applicable for each legitimate user. (*See* specification page 9, lines 26-29.)

In contrast, *Mohammed* merely discloses an authentication module 422 used to facilitate authentication of a subscriber device within an unlicensed wireless service area. (*See* col. 8, lines 51-53.) *Mohammed's* authentication module 422 includes data and executable instructions to emulate certain components of a licensed wireless network. (*See* col. 8, lines 53-56.) For example, authentication module 422 emulates a mobile switching center during an authentication process. (*See* col. 8, lines 56-58.) In *Mohammed*, using a home location register to maintain and provide identification information is not used to verify the legitimacy of an attempt to access a service and feature applicable for a user. Rather *Mohammed* merely discloses that module 422 emulates a mobile switching center during an authentication process.

McIntosh does not overcome *Mohammed's* deficiencies *McIntosh*. *McIntosh* merely discloses a WLAN 128 coupled to a public network 102 and adapted to enable voice and data communication between the private user equipment terminals (UE) 130. (*See* paragraph [0052], lines 1-7.) Access points of WLAN 128 can be coupled to a wired local area network (LAN 129). (*See* paragraph [0052], lines 7-11.) In *McIntosh*, a communication system 100 is able to communicate between public network 102 and UEs 130 while providing the same functions and services available from much more expensive radios UEs 116 of the public cellular network 104 and/or private cellular network 122. (*See* paragraph [0052], lines 12-19.) In *McIntosh*, using a home location register to maintain and provide identification information is not used to verify the legitimacy of an attempt to access a service and feature applicable for a user. Rather *McIntosh* merely discloses using access points to of WLAN 128 to enable UEs on less expensive LAN 129.

In addition, *Sinha* does not overcome *McIntosh's* and *Mohammed's* deficiencies. *Sinha* merely discloses a gateway device that couples a mobile telephone with a data network, such as the Internet, for voice communications. (*See* Abstract.) The gateway device in *Sinha* is configured to provide a consistent interface with a voice communications facility user, independent of a method of user-access to the gateway device, and independent of access to the data network. (*See* Abstract.) Like *McIntosh* and *Mohammed,* in *Sinha*, using a home location register to maintain and provide identification information is not used to verify the legitimacy of an attempt to access a service and feature applicable for a user. Rather *Sinha* merely discloses a gateway device that couples a mobile telephone with a data network.

Combining *McIntosh* with *Mohammed* and *Sinha* would not have led to the claimed invention because *McIntosh*, *Mohammed,* and *Sinha* either individually or in combination, at least do not disclose "means for providing identification information comprising: means for sending subscriber identity module (SIM) information to the wireless access point to register with the wired data network via the first wireless network, wherein the identification information is used to verify the legitimacy of an attempt to access a service and feature applicable for a user, the identification information is provided by a home location register," as included in dependent Claims 17-18. Accordingly, dependent Claims 17-18 patentably distinguish the present invention over the cited art, and Applicants respectfully request withdrawal of this rejection of dependent Claims 17-18.

VI. Rejection of Claims 22-23, 25-32, 41-41, 47 and 48Under 35 U.S.C. § 103(a)

In the Final Office Action, the Examiner rejected Claims 22-23, 25-32, 41-41, 47 and 48 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,853,851 ("*Rautiola*") in view of *Mohammed* in view of *McIntosh*. Claim 22 has been amended, and Applicants respectfully submit that the amendment overcomes this rejection and adds no new matter.

Amended Claim 22 is patentably distinguishable over the cited art for at least the reason that it recites, for example, "a broadband residential gateway comprising: a home location register, the home location register operative to maintain identification information used to verify the legitimacy of an attempt to access a service and feature applicable for a user." Support for the amendment can be found in the specification at least on page 9, lines 22-29.

Consistent with embodiments of the invention, a broadband residential gateway (BRG) 206 may communicate with a first portion 208 of a wired network that may include various functions that may provide for a voice and data service to a digital cordless handset 104. (*See* specification page 9, lines 22-24.) For example, first portion 208 may provide a home location register (HLR) 214. (*See* specification page 9, lines 22-25.) The HLR may maintain the information for each subscriber to the voice and data services provided to the digital cordless handsets 104. (*See* specification page 9, lines 25-26.) The information may include identification information for a user that may be used to verify the legitimacy of an attempt to access the service and may also store an identification of features applicable for each legitimate user. (*See* specification page 9, lines 26-29.)

In contrast, *Rautiola* at least does not disclose the aforementioned recitation from Claim 22. For example, *Rautiola* merely discloses a mobile station 21 in a wireless intranet office environment. (*See* col. 6, lines 31-33.) When outside this environment, mobile station 21 acts as a normal Global System for Mobile Communications (GSM) phone connecting to a base transceiver station (BTS) of a public GSM network. (*See* col. 6, lines 33-34.) However, when *Rautiola's* mobile station 21 is in the wireless intranet office environment, mobile station 21 may operate in one of two modes. (*See* col. 6, lines 34-36.) In one mode, it connects to a personal base unit 22 (e.g. either with a inter-connection cable, a infra-red connection, or with low power RF transmitter and receiver.) (*See* col. 6, lines 36-38.) In another mode, *Rautiola's* mobile station 21 connects to a GSM base transceiver station 23. (*See* col. 6, lines 38-40.) In *Rautiola*, a home location register to maintain and provide identification information is not used to verify the legitimacy of an attempt to access a service and feature applicable for a user. Rather *Rautiola* merely discloses that in one mode, a mobile station 21 connects to a personal base unit 22. In *Rautiola*, nothing is used to verify the legitimacy of an attempt to access a service and feature applicable for a user.

Mohammed does not overcome *Rautiola's* deficiencies *Mohammed* merely discloses an authentication module 422 used to facilitate authentication of a subscriber device within an unlicensed wireless service area. (*See* col. 8, lines 51-53.) *Mohammed's* authentication module 422 includes data and executable instructions to emulate certain components of a licensed wireless network. (*See* col. 8, lines 53-56.) For example, authentication module 422 emulates a mobile switching center during an authentication process. (*See* col. 8, lines 56-58.) In *Mohammed*, using a home location

register to maintain and provide identification information is not used to verify the legitimacy of an attempt to access a service and feature applicable for a user. Rather *Mohammed* merely discloses that module 422 emulates a mobile switching center during an authentication process.

McIntosh does not overcome *Rautiola's* and *Mohammed's* deficiencies. *McIntosh* merely discloses a WLAN 128 coupled to a public network 102 and adapted to enable voice and data communication between the private user equipment terminals (UE) 130. (*See* paragraph [0052], lines 1-7.) Access points of WLAN 128 can be coupled to a wired local area network (LAN 129). (*See* paragraph [0052], lines 7-11.) In *McIntosh*, a communication system 100 is able to communicate between public network 102 and UEs 130 while providing the same functions and services available from much more expensive radios UEs 116 of the public cellular network 104 and/or private cellular network 122. (*See* paragraph [0052], lines 12-19.) In *McIntosh*, using a home location register to maintain and provide identification information is not used to verify the legitimacy of an attempt to access a service and feature applicable for a user. Rather *McIntosh* merely discloses using access points to of WLAN 128 to enable UEs on less expensive LAN 129.

Combining *Rautiola* with *Mohammed* and *McIntosh* would not have led to the claimed invention because *Rautiola*, *Mohammed*, and *McIntosh,* either individually or in combination, at least do not disclose "a broadband residential gateway comprising: a home location register, the home location register operative to maintain identification information used to verify the legitimacy of an attempt to access a service and feature applicable for a user," as recited by amended Claim 22. Accordingly, independent

Claim 22 patentably distinguishes the present invention over the cited art, and Applicants respectfully request withdrawal of this rejection of Claim 22.

Dependent Claims 23, 25-32, 41-41, 47 and 48 are also allowable at least for the reasons described above regarding independent Claim 22, and by virtue of their dependency upon independent Claim 22. Accordingly, Applicants respectfully request withdrawal of this rejection of dependent Claims 23, 25-32, 41-41, 47 and 48.

VII. Rejection of Claim 24 Under 35 U.S.C. § 103(a)

In the Final Office Action, the Examiner rejected Claim 24 under 35 U.S.C. § 103(a) as being unpatentable over *Rautiola* in view of *Mohammed* in view of U.S. Patent No. 6,868,072 ("*Lin*"). Dependent Claim 24 is patentably distinguishable over the cited art for at least for the reason that is includes, due to its dependency on amended independent Claim 22, "a broadband residential gateway comprising: a home location register, the home location register operative to maintain identification information used to verify the legitimacy of an attempt to access a service and feature applicable for a user." Support for the amendment can be found in the specification at least on page 9, lines 22-29.

Consistent with embodiments of the invention, a broadband residential gateway (BRG) 206 may communicate with a first portion 208 of a wired network that may include various functions that may provide for a voice and data service to a digital cordless handset 104. (*See* specification page 9, lines 22-24.) For example, first portion 208 may provide a home location register (HLR) 214. (*See* specification page 9, lines 22-25.) The HLR may maintain the information for each subscriber to the voice

and data services provided to the digital cordless handsets 104. (*See* specification page 9, lines 25-26.) The information may include identification information for a user that may be used to verify the legitimacy of an attempt to access the service and may also store an identification of features applicable for each legitimate user. (*See* specification page 9, lines 26-29.)

In contrast, *Rautiola* at least does not disclose the aforementioned recitation from Claim 22. For example, *Rautiola* merely discloses a mobile station 21 in a wireless intranet office environment. (*See* col. 6, lines 31-33.) When outside this environment, mobile station 21 acts as a normal GSM phone connecting to a BTS of a public GSM network. (*See* col. 6, lines 33-34.) However, when *Rautiola's* mobile station 21 is in the wireless intranet office environment, mobile station 21 may operate in one of two modes. (*See* col. 6, lines 34-36.) In one mode, it connects to a personal base unit 22 (e.g. either with a inter-connection cable, a infra-red connection, or with low power RF transmitter and receiver.) (*See* col. 6, lines 36-38.) In another mode, *Rautiola's* mobile station 21 connects to a GSM base transceiver station (BTS) 23. (*See* col. 6, lines 38-40.) In *Rautiola*, a home location register to maintain and provide identification information is not used to verify the legitimacy of an attempt to access a service and feature applicable for a user. Rather *Rautiola* merely discloses that in one mode, a mobile station 21 connects to a personal base unit 22. In *Rautiola*, nothing is used to verify the legitimacy of an attempt to access a service and feature applicable for a user.

Mohammed does not overcome *Rautiola's* deficiencies *Mohammed* merely discloses an authentication module 422 used to facilitate authentication of a subscriber device within an unlicensed wireless service area. (*See* col. 8, lines 51-53.)

Mohammed's authentication module 422 includes data and executable instructions to emulate certain components of a licensed wireless network. (*See* col. 8, lines 53-56.) For example, authentication module 422 emulates a mobile switching center during an authentication process. (*See* col. 8, lines 56-58.) In *Mohammed*, using a home location register to maintain and provide identification information is not used to verify the legitimacy of an attempt to access a service and feature applicable for a user. Rather *Mohammed* merely discloses that module 422 emulates a mobile switching center during an authentication process.

McIntosh does not overcome *Rautiola's* and *Mohammed's* deficiencies. *McIntosh* merely discloses a WLAN 128 coupled to a public network 102 and adapted to enable voice and data communication between the private user equipment terminals (UE) 130. (*See* paragraph [0052], lines 1-7.) Access points of WLAN 128 can be coupled to a wired local area network (LAN 129). (*See* paragraph [0052], lines 7-11.) In *McIntosh*, a communication system 100 is able to communicate between public network 102 and UEs 130 while providing the same functions and services available from much more expensive radios UEs 116 of the public cellular network 104 and/or private cellular network 122. (*See* paragraph [0052], lines 12-19.) In *McIntosh*, using a home location register to maintain and provide identification information is not used to verify the legitimacy of an attempt to access a service and feature applicable for a user. Rather *McIntosh* merely discloses using access points to of WLAN 128 to enable UEs on less expensive LAN 129.

In addition, *Lin* does not overcome *Rautiola's*, *Mohammed's*, and *McIntosh's* deficiencies. *Lin* merely discloses home phone line network devices that conforms to

different standards versions and are interconnected and interoperable on a UTP transmission medium. (*See* Abstract.) Higher order devices in *Lin* support an overlaid dual logical network structure that allows two pair of higher order devices to communicate simultaneously using two separate frequency bands. (*See* Abstract.) Like *Rautiola* and *Mohammed*, in *Lin*, using a home location register to maintain and provide identification information is not used to verify the legitimacy of an attempt to access a service and feature applicable for a user. Rather *Lin* merely discloses home phone line network devices that are interconnected and interoperable on a UTP transmission medium. In *Lin*, nothing is used to verify the legitimacy of an attempt to access a service and feature applicable for a user.

Combining *Rautiola* with *Mohammed*, *McIntosh*, and *Lin* would not have led to the claimed invention because *Rautiola*, *Mohammed*, and *Lin* either individually or in combination, at least do not disclose "a broadband residential gateway comprising: a home location register, the home location register operative to maintain identification information used to verify the legitimacy of an attempt to access a service and feature applicable for a user," as included in dependent Claim 24. Accordingly, dependent Claim 24 patentably distinguish the present invention over the cited art, and Applicants respectfully request withdrawal of this rejection of dependent Claim 24.

VIII. Conclusion

In view of the foregoing remarks, Applicants respectfully request the reconsideration and reexamination of this application and the timely allowance of the pending claims. The preceding arguments are based only on the arguments in the Office Action, and therefore do not address patentable aspects of the invention that

were not addressed by the Examiner in the Office Action. The claims may include other elements that are not shown, taught, or suggested by the cited art. Accordingly, the preceding argument in favor of patentability is advanced without prejudice to other bases of patentability. Furthermore, the Office Action contains a number of statements reflecting characterizations of the related art and the claims. Regardless of whether any such statement is identified herein, Applicants decline to automatically subscribe to any statement or characterization in the Office Action.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 13-2725.

Respectfully submitted,

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